## DR. THOMAS MCCULLOCH AND LIBERAL EDUCATION

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In times of bigot and distempered wills,
McCulloch, strong and stern as his native Scottish hills,
And fired with Faith in God and Right,
Held up, undauntedly, the lamp of Learning's light.

J. D. LOGAN

R. THOMAS McCULLOCH. the first President of Dalhousie College, died in Halifax, September 9th, 1843, the last day of the week on which the college had opened. He had spent the summer holidays in the western parts of the province. collecting specimens for a museum, which he and his son Thomas hoped to see established in Halifax; on his return, he had been struck down with influenza; but he was in his place on Monday, when college opened, and lectured for two hours on logic and moral philosophy. These were his last lectures; and five days later he was dead. He, therefore, may be said to have died in harness, in the very act of giving his adopted countrymen an insight into the operations of their own minds and of providing a museum as a basis for the scientific study of natural history.

Little notice was taken of his death at the time, which was one of acute denominational and political controversy; no one seems to have realized that Nova Scotia had lost its ablest and most persistent champion of a liberal education: one, who for almost forty years had striven to awaken his adopted countrymen to the meaning, purpose and need of such education, and for more than thirty years had been foremost in actually providing it.

The Morning Post, owned and edited by J. H. Crosskill, who had been registered at Dalhousie in 1839 and then gave his age as twenty-two, spoke of McCulloch as "a man of vast mental attainments, and a profound investigator into the mysteries of nature", and "as one of the prominent leading minds that have given Nova Scotia some claim to literary distinction." The Novascotian, then controlled and edited by Richard Nugent, saw him chiefly against the background of Pictou Academy and the consequent political, sectarian and controversial dissension which arose from it, and deplored the fact that he had occupied

so much time in polemical contests that might have been more usefully employed: for "as he possessed an original and powerful intellect, which had been strengthened by attainments of a high order, he might, under more auspicious circumstances, have left something that would imperishably have connected his name with literature and science." Both these writers were thinking more of Nova Scotia's temporary reputation abroad than of the permanent foundations which McCulloch had laid for the progressive and continuing moral and intellectual development of its people and, therefore, both failed to see beyond their very limited horizon. More than a year later, after Howe had returned to the editorial chair. The Novascotian published a fuller appreciation of Dr. McCulloch: but even this overlooks the fact that, while he was a clergyman of one branch of the Presbyterian Church and an ardent champion of Pictou Academy even against Dalhousie, the educational ideals for which he contended and which to some extent he made prevail were of benefit not alone to the Scots of the Secession Church but to the entire population of the whole province, not alone for his generation but for all time. In fact, at this very moment he is a voice crying from the housetops against the short-sighted opponents of liberal education.

This deferred obituary notice of The Novascotian begins with the admission that contemporaries cannot form a just estimate of a man's labours, especially when they are directed towards the improvement of the intellectual and spiritual condition of masses of people, though "after a man of distinguished usefulness has gone down to the grave, his labours, like the radiance which the sun, after it has sunk below the horizon, imparts to the lingering twilight, are still visible, and betoken the worth of the departed." It states that few men had been more prominent in Nova Scotia than Dr. McCulloch, and that there were few whose labours had been more extensively useful. "Possessed of a high order of intellect, which had been strengthened and enriched by no inconsiderable classical and scientific attainments, he might have sen to eminence in Great Britain, and perhaps been one among he lights of the age, the most conspicuous of whom were some of his contemporary countrymen. Uninfluenced by those motive's of personal comfort and ambition which usually have a bearing upon young men of talent and education, in choosing a sphere of action on the great theatre of the world, he sought the wilds of Nova Scotia, to administer to the spiritual wants of the Scotch settlers, that had come across the Atlantic, and located themselves in the eastern section of the province." The article then tells of conditions in Nova Scotia at the time of his arrival, of McCulloch's efforts on behalf of religious and social improvement, of his struggles against educational monopoly, and of his achievement in founding Pictou Academy; and it offers the following estimate of his contribution to his adopted country, while concluding that Nova Scotians have reason to rejoice that his feet ever trod our rugged shores:

One effect of this Seminary was, to open the doors of King's College to Dissenters. But the prominent benefits that have been conferred upon Nova-Scotia, through the agency of Dr. Mc-Culloch, are to be found in some scores of young men who were educated at the Pictou Academy; and who have since been useful in the Provincial community. 'Every like begets its like', and the Alumni of this Institution have infused a taste for knowledge among the masses by whom they are surrounded. Through means that may be distinctly traced to the Doctor's labours, has many a flourishing common school been opened, and many a pious clergyman educated, who is now fulfiling all the duties and responsibilities of his high and holy calling. Thus have the mental, moral, and spiritual interests of one class of Presbyterians in Nova-Scotia been prodigiously aided by the exertions of one individual; and the impulse he gave to these interests, will continue to be felt for generations to come. Although 'he has gone the way of all the earth,' in almost every neighbourhood where there is a body of seceding Presbyterians, are living monuments of his usefulness, and they afford a more striking testimony of the benefit of his labours, than any that could be inscribed upon a marble cenotaph reared to his memory.

This article as a whole was a generous and sincere tribute to McCulloch and, in some respects, was more discerning than such contemporary notices generally are; but as it discusses neither his educational ideals, apart from his objections to educational monopoly, nor his efforts on behalf of a sound system of provincial education for all, irrespective of race or creed, it cannot be allowed to stand as a final estimate: for it was these educational ideals and his heroic struggles to realize them, rather than any particular educational institution or agency of his day, that were of universal validity and constitute his permanent contribution to posterity.

It is obviously impossible in this short article even to outline the varied activities of McCulloch's busy life; but reference must be made to such of them as had a direct bearing upon his work as an educator. He came to Nova Scotia at 27 years of age, with both a liberal and a professional education, and with that desire for further improvement which he always regarded as one of the chief fruits of a liberal education. At the University of Glasgow he had studied both Arts and Medicine; at the Secession Divinity Hall he had studied Theology; and, during his four years as pastor in Stewarton, had kept up his studies in languages and literature and read widely in ecclesiastical and constitutional history. He arrived in Pictou in the autumn of 1803, as a missionary to Prince Edward Island; but because of the lateness of the season, which made his passage to the Island difficult, and of a "pair of globes," which impressed the people of Pictou, he was prevailed upon to stay in Nova Scotia. In the following spring, he was called to a church in Pictou, and continued to serve this congregation until 1824, when he felt that he had discovered his true vocation as an educator and could not do justice to both professions.

Within three years of his arrival in Nova Scotia, McCulloch made up his mind that one of the chief needs of the province was an institution in which local talent could be developed. regardless of race or creed, to perform the various duties of society and he promptly organized a society for the erection of a college to that end. As a clergyman, he naturally made his first appeal on behalf of a native ministry; but he had no thought of restricting education to those who looked forward to service in the Presbyterian Church. In an address to this society, in 1806, he said: "Our view in establishing this institution is the instruction of youth. We do not merely design to advance them in learning; we propose that much care be taken in forming their minds, by correcting the natural propensities of the heart and instilling into them the principles of virtue, that education may not merely make them great but good men and good members of society. In doing so we intend to furnish them with the means of an extensive and liberal education; and this we hope, in connection with the former, will tend to make them ornaments to human nature and an honor to their country."

As this first move proved abortive, McCulloch opened a school in his own home, then built a log college on his own lot, and proceeded to demonstrate the usefulness of such an institution. When the Grammar School Act of 1811 was enacted, he was appointed Master and used his own building as the Pictou Grammar School. His teaching was so successful that in 1815, when this building was burned down, the people of Pictou, who had earlier held aloof, hastened to build a new grammar school for themselves. Moreover, when McCulloch revived his idea of

a college to provide a liberal education for all who wished to improve their minds, many of them supported him in those petitions to the Legislature, which finally resulted in the establishment of Pictou Academy. Once again example had proved better than precept; and, in addition, when the Academy was opened, McCulloch had an eager group of students prepared by himself to profit by advanced instruction. He taught in the grammar school until the end of 1817, and, early in the following year, while the Academy was under construction, he opened classes in a private house; but in December he commenced instruction in the Academy itself, and continued to do so until 1838, when he was transferred to Halifax, as Principal of Dalhousie College.

Though much preoccupied with the promotion and organization of the Academy, and still serving his congregation in Pictou. McCulloch did not overlook the need of education for the whole province, or the lessons to be derived from educational movements elsewhere. In the Acadian Recorder, January 24. 1818, he called attention to the proposal of the President of the United States to institute national seminaries for the purpose of diffusing knowledge among his fellow-citizens; and, while commending the Americans for their educational activities. he pointed out the danger of Nova Scotians becoming hewers of wood and drawers of water for the Republic, unless they too embarked upon a more active programme of education, to counteract "the encroachments of a nation which rests its aggrandizement upon the increase of intelligence." He commended the government of Nova Scotia for its efforts to establish grammar schools in every county; but contended that, even if they were better managed and more common, grammar schools alone could not give an adequate preparation for those people who "enter into public offices, in which enlarged intelligence alone, will secure the general prosperity"; and he questioned how far it was "consistent with the honour and even safety of government, that any inhabitant of this Province should be forced to seek his education in foreign countries." Since only the most wealthy parents could send their children to the colleges of Great Britain, he felt that unless higher education were provided at home, the majority of Nova Scotians must either remain uneducated, in which event they would have to rely upon the neighbouring republic for leadership, or they must attend American colleges, where they could hardly expect to be trained in the principles of the British constitution. In a word, McCulloch saw in "the enlargement" of our educational institutions the only safeguard against the intellectual imperialism of the Americans; and, in the belief that the matter was urgent, he called upon his readers

"to discuss a point of such general importance."

His invitation brought forth several letters in the Free Press and Recorder; but only those from Dr. Cochran of King's College (Pacificus) were answered in detail by McCulloch, as they insisted that no other college was necessary and that its curriculum provided for all the needs of the province. The following extract from McCulloch's replies to these letters further illustrates both his view of the special needs of Nova Scotia and the spirit of monopoly against which he had to contend.

In stating my sentiments formerly, it was not my intention to interfere with the College at Windsor. I designed merely to show that we now require such an open seminary, as may afford the instruction adapted to our present circumstances; and I do think, that, for many reasons, the friends of that institution ought to be satisfied in the enjoyment of its excellencies. By bringing it forward as the only seminary of the kind which should exist in the province, they may provoke discussion, little calculated to corro-

borate the peace-making labours of Pacificus.

Of the necessity of an open institution for the higher branches of learning, the intelligent part of the community are sufficiently aware-It is requisite, however, to observe, that should we be so fortunate as to obtain such a seminary, its utility will depend entirely on the principles upon which it is conducted. The system of instruction adopted ought to have a just regard to the relative importance of the different branches of learning and also to the degree at which the province stands in the scale of civilized society. Among us, literature is yet in its infancy, and it will be a long time before many will be disposed to devote to it that quantum of time which would be requisite to render them accomplished scholars. Besides, the resources of the province are not sufficient to afford to education either that extensive variety or splendid establishment with which it appears in European Colleges. If I might hazard an opinion, I would say that a system of education adapted to the present state of this province, would be that whose principal force was directed to bear upon the active purposes of life. I would not be understood as disregarding classical literature. An acquaintance with Latin and Greek is essential to a good education. Every scholar should possess a moderate knowledge of these languages. But after all, they are merely the bricks and mortar of education: after they have been provided, the fabric must be reared; and it appears to me that the time devoted to these, should be proportioned to the period to be afterward expended upon higher studies. For a long time, few cases will occur among us in which a critical knowledge of the learned languages will be of great importance; and none of those persons who receive a regular education, have the prospect of spending their days in literary retirement. They must look forward to the discharge of duties, high and important to the interests of the community. Upon these duties; therefore, the system of education should be made to bear; and in order to this end, instead of enabling them to display their pedantry by interlarding Latin and Greek phrases with the chit chat of life, it would be more profitable to give them an accurate acquaintance with the operations of their own minds, to teach them to classify their knowledge, and communicate their sentiments and to furnish them with those just views of the various social relations and duties, and that knowledge of mathematical and physical science, which would be every day useful to the community and honourable to themselves.

Apart from the influence which McCulloch's letters had upon contemporary public opinion, they enabled him to clarify his own ideas, and to arrange them in logical form for his address at the opening of Pictou Academy in December, 1818, on "The Nature and Uses of a Liberal Education." Though this was by no means his last pronouncement on education, it embodies his mature judgment, and lays down those principles which had inspired his previous efforts and from which he never swerved to the end of his laborious days, whether contending for the maintenance of Pictou Academy as an institution of higher education or striving to breathe life into the dry bones of Dalhousie College.

Unlike many theorists before and since that date. McCulloch approached his subject by an examination of the nature of man and his duties in organized society, before attempting to discuss the kind of education that he required. Beginning with the human mind, he asked himself what was supplied by nature, in order to discover what should be supplied by nurture. In other words, what was the function of education for human beings in a given physical and social environment? Without pausing to take sides in the controversy as to whether the mind possessed innate knowledge, or was a tabula rasa on which future experience alone could write, he was content with the fact that the mind possessed "the stamina of subsequent improvement," and manifested a tendency to supply its original want of intelligence in response to the stimuli of its physical and social environment. After describing briefly the means by which the infant mind acquired knowledge of objects and events about it, the necessarily circumscribed limits of education in primitive societies, and the evolution of the conventional system of elementary education, he asserted that no civilized nation could be satisfied with the Three R's alone, but must provide youth with the means of a

liberal education as a barrier against barbarism and the best

rational means for the improvement of the world.

He then proceeded to define a liberal education progressively: always insisting that its end was "the improvement of man in intelligence and moral principle, as the basis of his subsequent duty and happiness": that man must be considered "as he exists in society, having property, social relations, and an interest in the general prosperity"; and that society itself must be considered "merely as a link in the chain of existence, and equally connected with the past and future ages." His progressive definition of liberal education was, in the final analysis, but an amplification of the proverb: "wisdom is the principal thing; therefore get wisdom: and with all thy getting get understanding:" and. although he illustrated it chiefly by reference to the learned professions of law, medicine and theology, he maintained the thesis that a liberal education was necessary not only for those who were the custodians of property, health and morals but also for those who practised any of the arts and did the world's work: for they too had to live in organized society and should be helped to understand both the principles of the art or trade which they practised and the spirit of the society in which they lived, if there was to be any further progress in the arts of life or in the art of living.

On the long view of educational reform, these ideas are as sound today as they were one hundred and twenty-five years ago; and are a basis on which some of the cruder attacks upon the liberal arts colleges can be met. Though McCulloch was living in a state of society much less advanced than today and was arguing more in support than in defence of liberal education, his arguments can be made use of still; for our society is still but a link between the past and the future; and there is still need for specialists in philosophy, history, languages, mathematics and general science to provide a liberal education for the professional man, the mechanic, or the average citizen, all of whom exercise the franchise and have an influence for good or ill upon the destiny of their country and of mankind.

It was his emphasis upon getting understanding of both the nature of man and his duties in a society, which was but a link between the past and the future, that determined his view of the contents of a curriculum for his academy or college. Regarding the Three R's as tools already acquired, and acquired in such a way as to inspire the pupils to use them in the furtherance of their education, he approved classical studies warmly, particularly

Latin, for both their direct and indirect contributions to knowledge; but he laid most stress upon moral and natural philosophy, mathematics and natural science, as best calculated to enable the student to discern the general principles which governed his world both physical and social. For the same reason, he emphasized the need of well-selected libraries, adequate philosophical apparatus and well-filled museums as an aid to instruction.

When McCulloch came to Nova Scotia he brought with him no small library and from the beginning he tried to build up a library for his school. In 1815he petitioned Sir John Sherbrooke for a grant from the "Arms Fund" to that end; and his letter reveals both his recognition of the educational value of a library and his understanding of the mind of youth. After describing his efforts to give their minds "a bias favourable to farther improvement," he wrote: "But could the scholars have access to a few books of amusement and miscellaneous information adapted to their capacities it would give them a taste for reading and imperceptibly impress upon their minds the importance of education. It would also tend to produce habits of thinking and it is unnecessary to prove to your Excellency that on account of the influence of early habits it must be always important to give youth a bias to mental improvement. An arrangement of this kind is the more desirable because in the present stage of society in this province boys are almost completely excluded from such inducements to learning."

Again in the Letters of Mephibosheth Stepsure (1821-22), he quotes Parson Drone as saying that "an inclination to read is an incalculable gain: that, beside the information and enjoyment which reading affords, it leads to those steady habits which constitute character and qualify persons for the duties of social life"; and he makes the Parson criticize the selection of stodgy books for the first Pictou library as follows: "Mr. Drone told them that they were doing wrong; that, if they wished the youth to read, they must provide books which are engaging to youth; and that, if they did not render amusement an introduction to rational and religious information, they would not succeed."

Soon after the Academy was established, McCulloch was able to obtain the apparatus of Dr. Reid of Edinburgh for his courses in natural philosophy; and he early began to collect specimens for a museum of natural history and to correspond with curators of museums in Great Britain. In 1823 he was made an honorary member of the Natural History Society of Edinburgh University and also of both the Literary and Philosophical Society

and the Antiquarian Society of Newcastle. On a visit to Scotland (1825-26) he made personal contacts with learned societies and movements in the scientific world, purchased lapidary's-wheels and a turning lathe for his son Thomas, who was rapidly becoming an expert taxidermist, and decided to continue his scientific work with even greater enthusiasm. Altogether, he and his sons made three museum collections. The entomological part of the first was presented to his alma mater and placed in the Hunterian Museum of Glasgow University. His second, described by Mr. Audubon as the finest private collection in North America, was offered to the province for £500 but, on this offer being declined, was disposed of in London, forming part of the cargo of the Royal William in transit. The third was collected while Mc-Culloch was principal of Dalhousie College, and was intended partly to illustrate lectures in natural history: geology, mineralogy, zoology and botany, when a chair in those subjects should be established, but also as the nucleus of a provincial museum, if the province would defray part of the expenditure involved. Unfortunately, the legislators of that day were preoccupied with political problems and not too sympathetic with the project. One of the members of the Assembly, in opposing a resolution for assistance declared that the only benefit of a museum was "that their great-grandchildren could see the frogs and butterflies that their great-grandfathers ran after." As his view prevailed, McCulloch was left to continue his collection without assistance; and he died before it was finished. Later, it was presented by his son to Dalhousie College, where it still stands, after a hundred years, as a tribute to the foresight of McCulloch, and a model of careful selection and workmanship.

McCulloch was also a pioneer in adult education, by means of extension lectures in chemistry and natural philosophy. In 1829, he gave a series of popular lectures on Chemistry in Pictou. In 1830, and again, in 1832, he gave a series of lectures on natural philosophy in Halifax. These lectures, which were accompanied by experiments, were repeated during the next two years at such widely separated centres of the Maritime Provinces as Charlottetown, Miramichi and St. John. They were given in intervals snatched from the exacting labours of his profession and were part of the propaganda which he carried on for more than three decades on behalf of a liberal education, as principal of the Grammar School for eight years, of the Academy for twenty, and of Dalhousie College for five. In 1830, the Colonial Patriot wrote of him. on his return from a lecture trip to Halifax, "It is not from

labour to rest with him, but from labour to labour, as the ringing

of the College Bell hourly reminds us."

Incidentally, the spokesman for one of the classes to which he had just lectured in Halifax, on presenting him with a gold snuff-box as a token of appreciation, had anticipated his obituary notice in much warmer terms than were finally used by *The Novascotian*. After complimenting him on his lectures and on the zealous and indefatigable use of his talents, he expressed the hope that, at some far distant date, his obituary notice would carry the same eulogy as had been pronounced over the Immortal Pitt: *Non sibi sed patriae vixii*: He lived not for himself but for his country.

In its actual obituary notice, The Novascotian had deplored the time wasted by McCullch in controversy; but it is difficult to see how controversy could have been avoided under the circumstances; and it is doubtful if McCulloch's latent talents would have found expression if they had not been called forth by the bitter opposition which his ideas and his Academy evoked. As it transpired, the talents which he displayed and the labours which he performed were versatile and prodigious; and, if it cannot be said that he lived for his country alone, at least it can be said that he strove to make it a better country in which to live, that his main pre-occupation for the last twenty-five years of his life was the interpretation, establishment and defence of an unrestricted system of liberal education, and that he did more than any of his contemporaries to remove the obstacles in the way of its ultimate establishment.